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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,721	01/25/2002	Vladimir Pelekhaty	346	2154

2292 7590 04/08/2004

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EXAMINER
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PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/056,721	Applicant(s) PELEKHATY, VLADIMIR	
	Examiner Joshua L Pritchett	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11, 12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 12 and 14-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

This action is in response to Request for Continued Examination filed December 31, 2003 and Amendment filed November 3, 2003. Claims 11 and 14 have been amended as requested by the applicant.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 12, 14-16 and 18-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Cushing (US 6,011,652).

Regarding claims 11 and 14, Cushing discloses an optical communication path and a plurality of optical filtering elements coupled to the optical communication path (col. 3 lines 1-2) each of the plurality of filtering elements having a single optical interference filter that includes a plurality of alternating high and low refractive indices (Fig. 3) two passbands, a first passband being configured to add/drop a plurality of optical signals each of the optical signals being at a respective one of a plurality of wavelength a second passband of the optical interference filter being configured to add/drop a service channel at a wavelength different than the plurality of

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wavelengths of the optical signals (Fig. 6a). The optical communication path is the path the light takes through the filter that produces the transmission spectrum of Fig. 6a. Cushing discloses that Fig. 6a represents the transmission data of an optical communication device comprised of a five-cavity bandpass filter. Cushing shows a cavity bandpass filter with alternating high and low refractive index layers in prior art Fig. 3. Each of the filters above and below the cavity are considered a filtering element, thus a five-cavity bandpass filter with include six filtering elements. Fig. 6a shows that the filtering elements pass two separate sets of wavelengths, one at about 1310 nm and one at about 1550 nm.

Regarding claim 12, Cushing discloses the optical communication path is a continuous optical communication path (Fig. 3). Fig. 3 shows that a cavity bandpass filter, as used in the transmission spectrum for Fig. 6a, has a continuous path.

Regarding claim 15, Cushing discloses the plurality of wavelengths is within a range of 1530 and 1570 nm and the service channel is spectrally spaced from the plurality of wavelengths (Fig. 6a).

Regarding claims 16 and 22, Cushing discloses the wavelength of the service channel is substantially equal to 1310 nm (Fig. 6a).

Regarding claim 18, Cushing discloses the plurality of optical signals corresponds to an optical payload channel, the optical payload channels being separated by a channel spacing (Fig. 6a).

Regarding claims 19 and 23, Cushing discloses in a separate embodiment (Fig. 7) the plurality of optical payload channels is comprised of six optical payload channels (Fig. 7). Fig. 7

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shows transmission peaks at 1000 nm, 1150 nm, 1200 nm, 1325 nm, 1350 nm, and 1550 nm. Fig. 7 shows the transmission spectrum of a three-cavity bandpass filter.

Regarding claim 20, Cushing discloses each of the six optical payload channels has a center wavelength within a range of 1530-1570 nm (Fig. 7).

Regarding claim 24, Cushing discloses the six payload channels are spaced apart by a predetermined channel spacing (Fig. 7).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cushing in view of Alexander.

Cushing teaches the invention as claimed but lacks reference to the use of a service channel with a wavelength of 1625-1650 nm. Alexander teaches that a service channel of substantially 1310 nm (col. 3 lines 64-66) can be changed to between 1625 and 1650 nm (col. 7 lines 64-65). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the service channel of Cushing have a wavelength of between 1625

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and 1650 nm as taught by Alexander for the purpose of increasing the longevity of the device by using lower energy light incident the interference filtering elements.

### ***Response to Arguments***

Applicant's arguments with respect to claims 11, 12 and 14-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

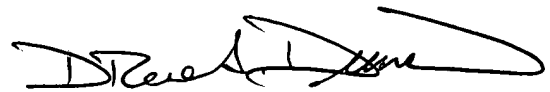
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JLP

Handwritten initials JLP in black ink.Handwritten signature of Drew A. Dunn in black ink.

**DREW A. DUNN**  
**SUPERVISORY PATENT EXAMINER**